

Claims

1. An electronic whiteboard having flexible membrane electromagnetic induction generating device, including an electronic whiteboard main unit having a writing layer as surface, a bottom support bracket layer as bottom, an input induction section, a recognition controlling circuit, a signal output device inside between the said two layers and a frame around, and also including an input pen, characterized in that: said induction section is composed of a covering layer, an electromagnetic induction generating layer and a bottom support bracket layer, wherein the base layer of the electromagnetic induction generating layer is an insulated flexible membrane, the surfaces of which are printed with an electromagnetic induction receiving antenna array, thereby a flexible membrane electromagnetic induction generating layer is constituted, the output of that electromagnetic induction generating layer is connected to the recognition controlling circuit, and the input pen has a radio signal generating device.

2. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: said recognition controlling circuit is set on a PCB (printed circuit board).

3. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1 or 2, characterized in that: the antenna's output port of said flexible membrane electromagnetic induction generating layer is spliced or plugged or welded to the corresponding input pin on the PCB (printed circuit board).

4. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1 or 2, characterized in that: said electromagnetic induction receiving antenna array is induction antenna cells distributed along X axis and Y axis.

5. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 4, characterized in that: said induction antenna array cells are printed on the two sides of the membrane surfaces respectively.

6. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 5, characterized in that: more than one layer of induction antenna cells along X axis and Y axis are printed on the two sides of the membrane surfaces and the layers are insulated from each other.

7. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 6, characterized in that: the intervals between the induction antenna cells of each layer can be uniform or different for more than one layer of induction antenna cells.

8. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, 5, 6 or 7, characterized in that: said induction antenna cell is silver paste material or mixture material of silver paste and carbon paste.

9. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 4, characterized in that: said induction antenna cell is annular or linear.

10. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 5, 6 or 7, characterized in that: said induction antenna cell is annular or linear.

11. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1 or 3, characterized in that: said membrane can be a film material.

12. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: a shielding layer can be provided behind said electromagnetic induction generating layer to increase the anti-interference capability.

13. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: a pressure sensor along Z axis can be provided behind the tip of said input pen, and the output of the sensor is connected to the control port of electromagnetic wave generating device.

14. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: said signal output device is a cable connecting device or a wireless data communicating device.

15. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 14, characterized in that: said cable connecting device is a cable having USB joint interface.

16. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 14, characterized in that: said wireless data communicating device is a radio frequency transceiver.

17. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: said signal output device is connected to a computer and/or a printer directly.

18. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: said signal output device is connected to a data storing equipment directly.

19. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: the radio signal generating device of said writing input pen is an electromagnetic wave generating device.

20. An electronic whiteboard having flexible membrane electromagnetic induction generating device as cited in claim 1, characterized in that: said radio signal generation device of the writing input pen has a RF generating or receiving device, corresponding RF receiving or generating device is provided on the whiteboard main unit.